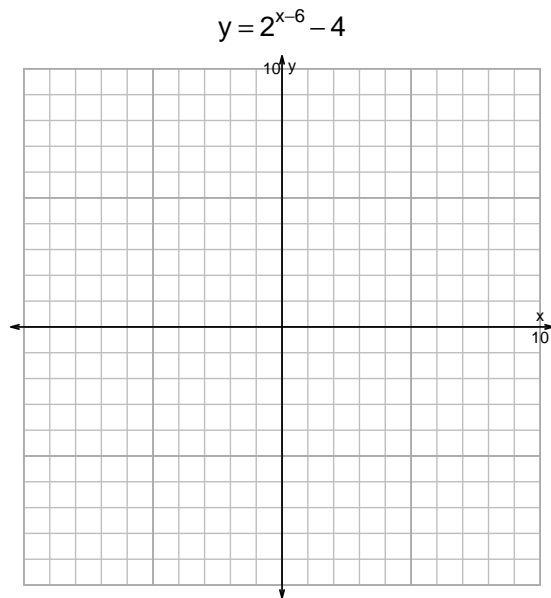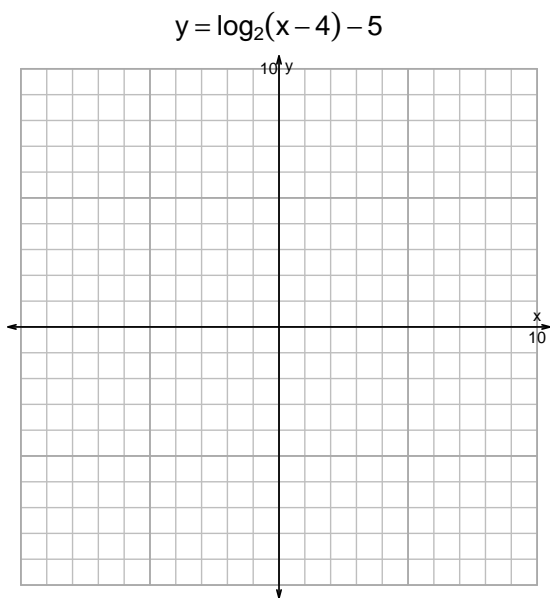Name: _____   Date: _____

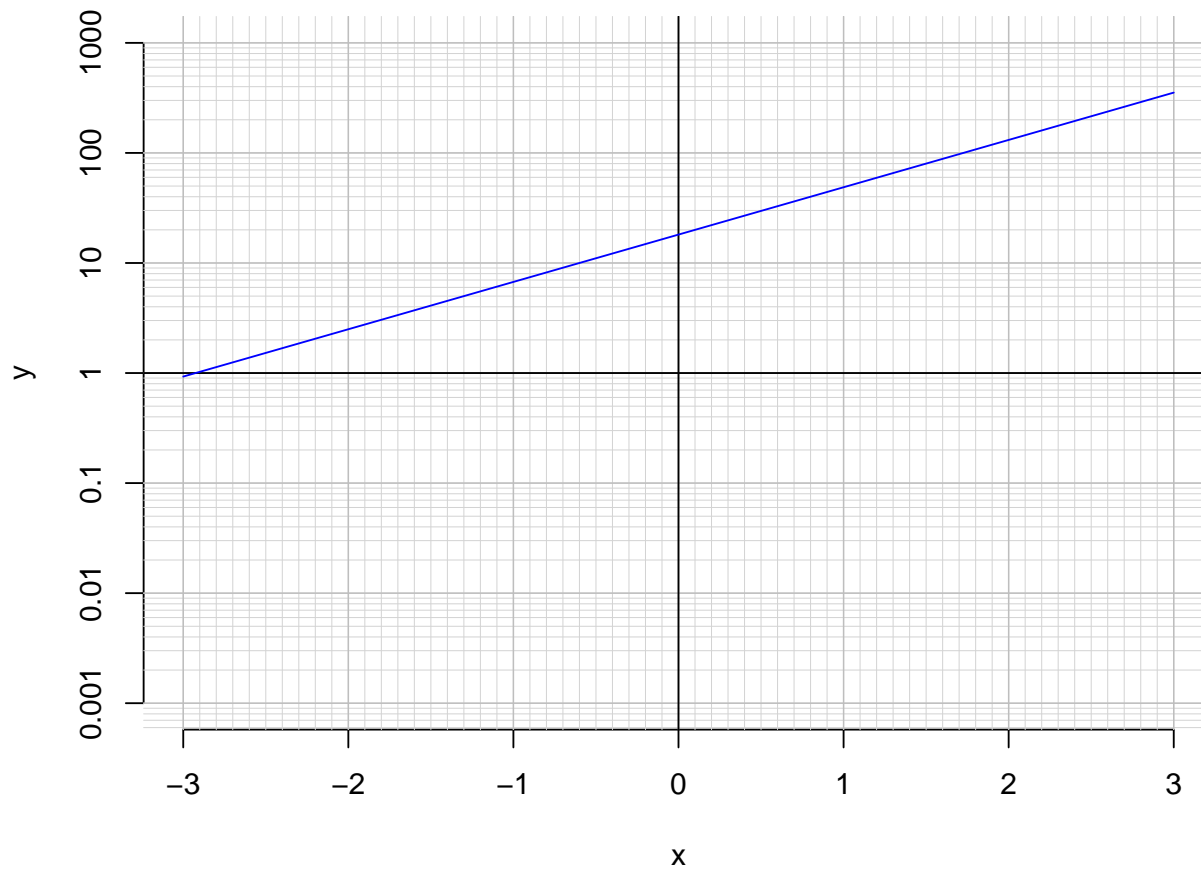## s18quiz: EXP LOG (Practice v146)

1. Graph $y = \log_2(x - 4) - 5$ and $y = 2^{x-6} - 4$ on the grids below. Also, draw any asymptotes with dotted lines.

$$y = \log_2(x - 4) - 5$$

$$y = 2^{x-6} - 4$$

2. Write (but do not evaluate) the solution to the equation below by writing a logarithmic expression.

$$-17 = \left(\frac{-3}{7}\right) \cdot 10^{4t/5}$$

3. An exponential function $f(x) = 18.1 \cdot e^{0.99x}$ is graphed below on a semi-log plot.

a. Using the plot above, evaluate $f(-1.3)$.

b. Express $f^{-1}(x)$, the inverse of f.

c. Using the plot above, evaluate $f^{-1}(20)$.